

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. (Currently amended) A method for implementing a scoreboard for tracking dependencies between instructions executing on a processor, comprising:

- associating an instruction with an index into the scoreboard, wherein the instruction is a load instruction, and wherein the scoreboard is maintained in a tangible form;
- associating the instruction with a scoreboard entry corresponding to the index;
- receiving an indication that a terminating event associated with the instruction has occurred, the received indication including a corresponding index into the scoreboard and the terminating event corresponding to receipt of load data associated with the load instruction; and
- identifying and invalidating, based on the received corresponding index, the scoreboard entry corresponding thereto, wherein the received corresponding index uniquely identifies the scoreboard entry corresponding to the instruction.

2.-5. (Canceled)

6. (Previously presented) The method of claim 1 further comprises:  
forwarding the instruction and the index to a load/store processing unit.

7. (Previously Presented) The method of claim 1 further comprises:  
receiving the index from a load/store processing unit.

8. (Original) The method of claim 1, wherein the scoreboard entry is one of a plurality of scoreboard entries.

9.-20. (Canceled)

21. (Currently amended) A method for tracking dependencies between instructions executing on a processor, comprising:

locating an entry in a scoreboard for an instruction with a scoreboard index returned from a load-store unit, wherein the instruction is a load instruction, and wherein the scoreboard is maintained in a tangible form; and

invalidating the located scoreboard entry, based on the returned scoreboard index, wherein the returned scoreboard index uniquely identifies the scoreboard entry corresponding to the instruction, and wherein the invalidating is responsive to receipt of data associated with the load instruction.

22. (Currently amended) The method of claim 21 further comprising:

installing the instruction in the scoreboard entry;

associating the scoreboard index for the scoreboard entry with the instruction; and

indicating the associated scoreboard index and the instruction to the load-store unit.

23. (Currently amended) The method of claim 21 further comprising maintaining the index and the instruction in the load-store unit at least until a terminating event that corresponds to the instruction.

24. (Canceled)

25. (Canceled)

26. (Previously presented) The method of claim 21, wherein a second instruction that is dependent upon the instruction is stalled until the scoreboard index is returned from the load-store unit.

27. (Canceled)

28. (Currently amended) An apparatus comprising:

a scoreboard unit that includes a plurality of scoreboard entries ~~configurable~~ configured to be indexed with scoreboard indices, the scoreboard unit ~~configurable~~ configured to indicate in each entry validity information for an instruction, wherein the instruction is a load instruction; and

an execution stage unit ~~configurable~~ configured to maintain scoreboard indices for respective instructions and to return scoreboard indices for use in locating and invalidating respective entries in the scoreboard unit, wherein the invalidating is responsive to receipt of data associated with the load instruction, and wherein the returned scoreboard indices uniquely identify a different one of the scoreboard entries which each correspond to a different instruction.

29. (Canceled)

30. (Previously Presented) The apparatus of claim 28 further comprising a decode unit configurable to stall instructions dependent upon operands indicated in locked entries of the scoreboard unit.

31. (Canceled)

32. (Previously presented) The method of claim 1, wherein the scoreboard entry corresponds to a register utilized by the instruction.

33. (Previously presented) The method of claim 21, wherein the scoreboard entry corresponds to a register utilized by the instruction.

34. (Previously Presented) The apparatus of claim 28, wherein each of the entries of the scoreboard unit correspond to registers utilized by the respective instructions.

35. (Previously Presented) The method of claim 1, wherein the invalidating of the scoreboard entry facilitates unstalling of at least one dependent instruction.

36. (Previously presented) The method of claim 1, wherein the scoreboard entry is not required to be compared to an associated destination register of the instruction prior to invalidation.